

Claims:

1. A system for providing domain name lookup and connection services to users of a data communication network, said system comprising a server located at a unique and predetermined address in said network, said server comprising:

5 first means responsive to communication inquiries from said network users for operating in conformance to a predetermined set of criteria to determine an address in said network uniquely assigned to one of a plurality of host entities; each said inquiry containing a first addressing term uniquely designating the location of said server in said network, and a second addressing term constituting a name having a non-unique association to all of said plural host entities; and

10 second means activated by said first means for redirecting each said inquiry to a unique one of said host entities.

2. A system according to claim 1 wherein said first and second means utilize "user profile" information obtained from each network user sending a said communication inquiry; said user profile information effectively establishing a criterion for uniquely selecting one of said host entities.

3. A system according to claim 2 wherein said user profile information is stored in computer devices operated by said respective users.

4. A system according to claim 3 wherein said user profile information is stored in the form of "cookies" placed in said computer devices by said server.

5. A system according to claim 3 wherein said user profile information is stored in the form of plug-in mini-applications placed in said computer devices by said server.

6. A system according to claim 2 wherein said user profile information is stored by said server in a location remote from the user sending a respective said inquiry.

7. A system according to claim 2 wherein, in the event that information available to said server is insufficient to make a unique determination of a host address to which a said respective inquiry should be directed, said server communicates directly with the originator of the respective inquiry to indicate a plurality of specific host address name options
5 apparently meeting the respective inquirer's criteria for connection and enabling the respective inquirer to select one of the indicated address name options.

8. A system according to claim 2 wherein said criterion for at least some of said inquirers is associated with a predetermined geographic locale in which the respective inquirers are situated.

9. A system according to claim 8 wherein said inquirers may be mobile and said predetermined locale may vary with movements of respective inquirers.

10. A system according to claim 8 wherein said inquirers are stationary and said respective predetermined locales are fixed.

11. A method of providing a name-based redirection service to users of a data communication network subscribed to said service, said method comprising:

receiving inquiries from said subscribed users containing generic names associated with both said service and destinations in said network separate from said service; a said
5 generic name being susceptible of association with more than one said separate destination;
in response to each said inquiry, unambiguously determining a single said separate destination; and

redirecting said request to said determined single separate destination.

12. The method according to claim 11 wherein each said step of unambiguously determining said single separate destination includes:

referring to subscriber profile information registered in association with said subscribed users to make respective said determinations.

13. The method according to claim 11 wherein said step of unambiguously determining said single separate destination, when a said generic name is associated with plural destinations in said network, includes steps of:

determining remoteness of each of said plural destinations relative to the instantaneous location of the source of the inquiry currently being processed; and

selecting, as the said single destination, a destination closest to said instantaneous source location.

14. The method according to claim 12 wherein at least a portion of said subscriber profile information of at least one of said subscribing users is stored at a location in said network currently used by the respective subscribing users, and wherein said step of determining a said single separate destination for an inquiry currently in the process of being redirected includes:

communicating with said currently used location to refer to profile information stored thereat.

15. The method according to claim 11 wherein, when a generic name in an inquiry currently being processed is found to be potentially associated with plural destinations in said network and information currently available to said service is insufficient to form a basis for unambiguously selecting a single one of said destinations as a target for redirection of the

respective inquiry, said step of determining said single separate destination includes a step of communicating bidirectionally with a said user at the originating location of the inquiry currently being processed to resolve any ambiguities preventing said selection of said single one of said destinations.

16. For a computer-based service to redirect inquiries through a data communication network, wherein an inquiry currently undergoing processing is potentially associated with plural destinations in said network, a software-based system for effecting redirection of said inquiry currently undergoing processing; said software-based system including:

5 means responsive to information contained in said current inquiry to ascertain destinations potentially associated with said inquiry; and

means using predetermined selection criteria for selecting a single one of said potential destinations, as the target for redirection of the respective inquiry.

17. A software based system in accordance with claim 16 wherein said means using predetermined selection criteria includes:

means for determining the instantaneous origin of the respective current inquiry;

5 means for determining relative distances between said potential destinations and said instantaneous origin; and

means for selecting a single one of said potential destinations that is closest to said instantaneous origin.